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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

UTILITY PATENT  
APPLICATION TRANSMITTAL LETTER

**Mail Stop PATENT APPLICATION**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Customer Number **2 1 8 3 9**

Sir:

Enclosed for filing is the utility patent application entitled:

HIGH DENSITY MAGNETORESISTANCE MEMORY AND MANUFACTURING  
METHOD THEREOF

17548 U.S. PTO  
10/714609  
111803

by the following named inventor(s):

Eun-sik KIM and Yong-su KIM

☒ Applicant(s) suggests Figure 3 for inclusion on the front page of the patent application publication and patent.

☒ Applicant(s) requests that the published application include the following assignment information:  
SAMSUNG ELECTRONICS CO., LTD., Kyungki-do, Republic of Korea

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☐ Small entity status is claimed.

Also enclosed are:

**DRAWINGS:** 6 sheets of formal drawings        sheets of informal drawings

**DECLARATION:** ☐ will follow ☒ executed, is enclosed ☐ unexecuted, is enclosed

**ASSIGNMENT:** ☒ is enclosed ☐ will follow

**CLAIM FOR  
PRIORITY  
UNDER 35 U.S.  
C. § 119 and/or  
365:**☒ is made in the declaration☐ is hereby made as follows

Country: Korea

Appl. No.: 2003-35302

Filing Date: 02-06-03<sup>dd-mm-yy</sup>

Country:

Appl. No.:

Filing Date:

Country:

Appl. No.:

Filing Date:

Country:

Appl. No.:

Filing Date:

☒ certified copy(ies) enclosed☐ certified copy(ies) will follow**OTHER PAPERS:** ☒ a General Authorization for Petitions for Extensions of Time and Payment of Fees☒ an Information Disclosure Statement☒ an Application Data Sheet (ADS)☒ Preliminary Amendment;Petition to Accept Color Drawings, including 3 sets of color drawing for each color  
Figure, and Petition fee of \$130.00☒ The filing fee has been calculated as follows ☒ and in accordance with the enclosed preliminary amendment:

CLAIMS					
	No. of Claims		Extra Claims	Rate	Fee
Basic Application Fee (1001)					\$ 770.00
Total Claims	12	MINUS 20 =	0	x \$18.00 (1202) =	\$ 0.00
Independent Claims	2	MINUS 3 =	0	x \$86.00 (1201) =	\$ 0.00
If multiple dependent claims are presented, add \$290.00 (1203)					
Total Application Fee					\$ 770.00
<input type="checkbox"/> Small Entity Status claimed - subtract 50% of Total Application Fee					\$ 0.00
Add Assignment Recording Fee of \$40.00 (8021) if Assignment document is enclosed.					\$ 40.00
<b>TOTAL APPLICATION FEE DUE</b>					<b>\$ 810.00</b>

☐ This application is being filed without a filing fee. Issuance of a Notice to File Missing Parts of Application is respectfully requested.☐ Charge \_\_\_\_\_ to Deposit Account No. 02-4800 for the fee due.☒ A check in the amount of \$ 810.00 is enclosed for the fee due.

- ☒ The Director is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17 and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800. This paper is submitted in duplicate.

Please address all correspondence concerning this application to:

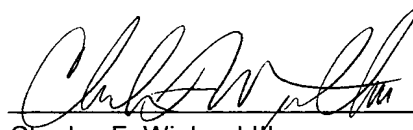
Burns, Doane, Swecker & Mathis, L.L.P.  
Customer Number **2 1 8 3 9**  
P.O. Box 1404  
Alexandria, Virginia 22313-1404

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

P.O. Box 1404  
Alexandria, Virginia 22313-1404  
(703) 836-6620  
Filed: November 18, 2003

By

  
\_\_\_\_\_  
Charles F. Wieland III  
Registration No. 33,096

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of

Eun-sik KIM et al

Application No.: Unassigned

Filing Date: November 18, 2003

Title: HIGH DENSITY MAGNETORESISTANCE MEMORY AND MANUFACTURING METHOD THEREOF

Group Art Unit: Unassigned

Examiner: Unassigned

Confirmation No.: Unassigned

**GENERAL AUTHORIZATION FOR PETITIONS  
FOR EXTENSIONS OF TIME AND PAYMENT OF FEES**

Assistant Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with 37 C.F.R. §1.136(a)(3), the U.S. Patent and Trademark Office is hereby provided with a general authorization to treat any concurrent or future reply requiring a petition for an extension of time for its timely submission as containing a request therefor for the appropriate length of time.

The Commissioner is hereby authorized to charge any appropriate fees under 37 C.F.R. § 1.17 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800. This paper is submitted in duplicate.

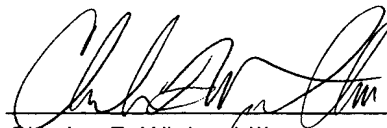
Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

P.O. Box 1404  
Alexandria, Virginia 22313-1404  
(703) 836-6620

Date: November 18, 2003

By



Charles F. Wieland III

Registration No. 33,096

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of

Eun-sik KIM et al

Group Art Unit: Unassigned

Application No.: Unassigned

Examiner: Unassigned

Filing Date: November 18, 2003

Confirmation No.: Unassigned

Title: HIGH DENSITY MAGNETORESISTANCE MEMORY AND MANUFACTURING METHOD THEREOF

**PETITION TO ACCEPT COLOR DRAWINGS**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. §§1.84(a)(2) and (b)(2), Applicant(s) hereby petitions for acceptance of the color Figure(s) enclosed herewith as formal drawings for inclusion in the above-cited application. Triplicates of color drawings for each color Figure are provided. The color Figure(s) is necessary for a complete understanding of the present invention. Entry of these drawings pursuant to 37 C.F.R. §1.84 is respectfully requested. Should the enclosed drawings require changes, it is respectfully requested that the Patent and Trademark Office notify the undersigned of same. The specification contains a statement as the first paragraph of the Brief Description of the Drawings alerting the reader to color drawings associated with the above-indicated application.

The Petition fee of \$130.00 (1460 is enclosed herewith. The Director is hereby authorized to charge any additional fees required by this paper, or to credit any overpayment, to Deposit Account No. 02-4800.


Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

P.O. Box 1404  
Alexandria, Virginia 22313-1404  
(703) 836-6620

Date: November 18, 2003

By

  
\_\_\_\_\_  
Charles F. Wieland III  
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11/20/2003 HMARZ11 00000099 10714609

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